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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,946	03/19/2002	Kyung-geun Lee	1293.1320	6311
49455	7590	05/16/2007		
STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER GIESY, ADAM	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 05/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/099,946	Applicant(s) LEE ET AL.	
	Examiner Adam R. Giesy	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 45-71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Examiner asserts that it is unclear what is meant by "increases or decreases together" or "increases or decreases oppositely" and that such language makes the claim indefinite.

To further prosecution, Examiner will interpret "increases or decreases together" or "increases or decreases oppositely" to mean --increases or decreases together in the same direction-- or --increases or decreases opposite from each other in the same direction-- (respectively).

Appropriate action is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 46, 47, 50-53, and 61-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Ono et al. (hereinafter Ono – US Pat. No. 6,317,403 B1).

Regarding claim 46, Ono discloses an optical disc comprising: first and second recording layers on which data are recordable and/or reproducible, the first and second recording layers having opposite track spiral directions and physical addresses recorded thereon (see Figure 3b); and recorded addresses of smallest recording units recorded on the optical disc, wherein: the recorded addresses are recorded during recording of the smallest recording units on the optical disc (Examiner asserts that it is inherent that logical or recorded addresses are recorded during recording of data to the disc), and on the first and second recording layers, the recorded addresses increase or decrease together with the physical addresses (see Figure 3b – note that the logical addresses increase with the physical addresses according to the figure as shown).

Regarding claim 47, Ono discloses all of the limitations of claim 46 as discussed in the claim 46 rejection above and further that the first recording layer the recorded addresses and the physical addresses increase together from an inner radius of the disc to an outer radius of the optical disc; and on the second recording layer, the recorded addresses and the physical addresses increase together from the outer radius of the disc to the inner radius of the optical disc (see Figure 3b).

Regarding claim 50, Ono discloses an optical disc drive comprising: an optical disc comprising first and second recording layers on which data are recordable and/or reproducible and having physical addresses recorded thereon, and recorded addresses of smallest recording units recorded on the optical disc, wherein: the recorded addresses are recorded during recording of the smallest recording units (Examiner asserts that it is inherent that logical or recorded addresses are recorded during

recording of data to the disc), and on the first and second recording layers, the recorded addresses increase or decrease together with the physical addresses (see Figure 3b – note that the logical addresses increase with the physical addresses according to the figure as shown); and a reader/writer which reads and/or writes the smallest recording units to/from the optical disc (see abstract).

Regarding claim 51, Ono discloses all of the limitations of claim 50 as discussed in the claim 50 rejection above and further that the first recording layer, the recorded addresses and the physical addresses increase or decrease from an inner radius of the optical disc to an outer radius of the optical disc (see Figure 3b – note that the logical addresses increase with the physical addresses according to the figure as shown); and on the second recording layer, the recorded addresses and the physical addresses increase or decrease from the outer radius of the optical disc to the inner radius of the optical disc (see Figure 3b – note that the logical addresses increase with the physical addresses according to the figure as shown).

Regarding claim 52, Ono discloses all of the limitations of claim 51 as discussed in the claim 51 rejection above and further that the first and second recording layers have a same track spiral direction (see Figure 3a).

Regarding claim 53, Ono discloses all of the limitations of claim 51 as discussed in the claim 51 rejection above and further that the first and second recording layers have an opposite track spiral direction (see Figure 3b).

Method claims 61-64 are drawn to the method of using the corresponding apparatus claimed in claims 50-53. Therefore method claims 61-64 correspond to

apparatus claims 50-53 and are rejected for the same reasons of anticipation (obviousness) as used above.

Allowable Subject Matter

5. Claim s 48, 49, 54-60, and 65-71 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 48 is allowable since the none of the prior art of record discloses or suggests an optical disc, comprising: first and second recording layers on which data are recordable and/or reproducible, the first and second recording layers having opposite track spiral directions and physical addresses recorded thereon; and recorded addresses of smallest recording units recorded on the optical disc, wherein: the recorded addresses are recorded during recording of the smallest recording units on the optical disc, and on at least one the first and second recording layers, the recorded addresses and the physical addresses increase or decrease oppositely.

Claim 49 is allowable as being dependent upon aforementioned claim 48.

Claim 54 is allowable since the none of the prior art of record discloses or suggests an optical disc drive, comprising: an optical disc comprising: first and second recording layers on which data are recordable and/or reproducible and having physical addresses recorded thereon, and recorded addresses of smallest recording units recorded on the optical disc wherein: the recorded addresses are recorded during recording of the smallest recording units on the disc, and on at least one of the first and second

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recording layers, the recorded addresses and the physical addresses increase or decrease oppositely; and a reader/writer which reads and/or writes data to/from the disc.

Claims 55-60 are allowable as being dependent upon aforementioned claim 54.

Method claims 65-71 are drawn to the method of using the corresponding apparatus claimed in claims 54-60. Therefore method claims 65-71 correspond to apparatus claims 54-60 and are allowed for the same reasons as discussed above.

The closest prior art by Ono et al. (US Pat. No. 6,317,403 B1) discloses a method of assigning logical addresses to physical address on a dual-layer optical disc. Ono does not disclose a dual layer disc with opposite track spiral wherein at least one of the layers include logical and physical addresses that increase or decrease oppositely.

Response to Arguments

6. Applicant's arguments with respect to claims 46-71 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

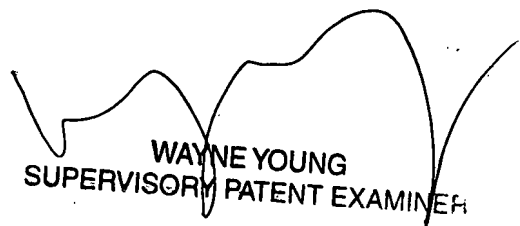
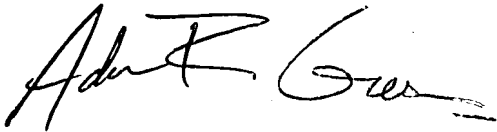
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 4/30/2007



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER